## (19) World Intellectual Property Organization International Bureau



(43) International Publication Date 13 October 2005 (13.10.2005)

# (10) International Publication Number WO 2005/095107 A1

(51) International Patent Classification7: E02D 37/00, E04G 23/02

B32B 35/00,

(21) International Application Number:

PCT/US2005/010066

(22) International Filing Date: 24 March 2005 (24.03.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/556,209

24 March 2004 (24.03.2004)

(71) Applicant (for all designated States except US): WILLAMETTE VALLEY COMPANY [US/US];

1075 Arrowsmith, Eugene, OR 97402 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): LOOMIS, Robert, M. [US/US]; 1760 W 34th Avenue, Eugene, OR 97405-1707 (US). STOLARCZYK, Craig, B. [US/US]; 1678 Oak Patch Road, Eugene, OR 97402 (US). ROGERS, Paul, D. [US/US]; 2969 Norkenzie Road, Eugene, OR 97408 (US). TIBA, Omar [US/US]; 3874 Ashford Drive, Eugene, OR 97405 (US).

- (74) Agents: MARGER, Jerome, S. et al.; Marger Johnson & McCollom, P.C., 1030 SW Morrison Street, Portland, OR 97205 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW:
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: RESTORING DAMAGED RAIL SEATS LOCATED ON CONCRETE RAIL TIES

(57) Abstract: A method for restoring a damaged rail seat located on a concrete rail tie. The method comprises applying a polymeric material comprising a poly(urethaneurea) material to the damaged rail seat located in the concrete rail tie; and restoring the damaged rail seat by curing the polymeric material under ambient temperature and pressure conditions. The polymeric material is substantially sag resistant and maintains its shape without substantial runoff from the concrete rail tie during the restoring of the damage rail seat.